I claim:

1. A fluid dynamic bearing mechanism for a motor, wherein a lubricant is continuously supplied into a minute gap formed between rotating parts and stationary parts, said minute gap including dynamic pressure grooves, and wherein a capillary seal part is formed at one end of the minute gap for preventing leakage of said lubricant, said fluid dynamic bearing mechanism comprising:

a bearing member;

a shaft member rotatably mounted in said bearing member;

an annular member on the shaft member side mounted on said shaft member at a location corresponding to said capillary seal part;

an annular member on the bearing member side mounted on said bearing member at a location corresponding to said capillary seal part;

a taper or step formed on the outer periphery surface of said annular member on the shaft member side; and

a taper or step being formed on the inner periphery surface of said annular member on the bearing member side;

wherein the outer periphery surface of said annular member on the shaft member side and the inner periphery surface of said annular member on the bearing member side are arranged close to each other in the axial and radial directions to form said capillary seal part, and to preventing said rotating parts and said stationary parts from disengaging from each other.

2. The fluid dynamic bearing mechanism of claim 1, further comprising:

dynamic pressure grooves formed either on the outer periphery surface of said shaft member or the inner periphery surface of said bearing member for

generating dynamic pressure to support a radial load; and

dynamic pressure grooves formed either on bottom surface of said annular member on the shaft member side or a surface of said bearing member opposing said bottom surface for generating dynamic pressure to support an axial load.

3. A fluid dynamic bearing mechanism of claim 1, wherein said annular member on the bearing member side is welded to said bearing member.

4. A fluid dynamic bearing mechanism of claim 1, wherein said annular member on the shaft side is made of quenched steel.

5. A fluid dynamic bearing mechanism of claim 1, wherein said annular member on the shaft side abuts the end surface of said rotor member, and thereby supports said rotor member in the axial direction.

6. The fluid dynamic bearing mechanism of claim 1, wherein an annular groove capable of alleviating boundary surface fluctuations of said lubricant in said capillary seal part is formed between said annular member on the shaft member side and said annular member on the bearing member side.

7. A fluid dynamic bearing mechanism of claim 1, further comprising:

a rotor attached to said shaft member; and

a plurality of lubricant supply ports formed on said rotor member, said supply ports opposing said capillary seal part in the axial direction.

8. A fluid dynamic bearing mechanism of claim 1, wherein said annular member on the shaft member side and said shaft member are produced from a single material as an integral piece.

9. A fluid dynamic bearing mechanism of claim 1, wherein said annular member on the bearing member side and said cylindrical member are produced from the same material as an integral piece.

10. A fluid dynamic bearing mechanism of claim 1, wherein said taper formed on the outer periphery surface of said annular member on the shaft member side and said taper formed on the inner periphery surface of said annular member on the bearing member side are formed in such a manner that the radial gap between them expands as it advances axially towards an end.

11. A fluid dynamic bearing mechanism of claim 1, wherein said step formed on the outer periphery surface of said annular member on the shaft side and said step formed on the inner periphery surface of said annular member on the bearing member side are formed in such a manner that the radial gap between one half outer periphery surface portion and one half inner periphery surface portion expands as it advances axially towards an end.

12. A fluid dynamic bearing mechanism for a motor, wherein a lubricant is continuously supplied into a minute gap formed between rotating parts and stationary parts, said minute gap including dynamic pressure grooves, and wherein a capillary seal part is formed at one end of the minute gap for preventing leakage of said lubricant, said fluid dynamic bearing mechanism comprising:

a bearing member;

a shaft member rotatably mounted in said bearing member;

an annular member on the shaft member side mounted on said shaft member at a location corresponding to said capillary seal part;

an annular member on the bearing member side abutting an axial end of said bearing member at a location corresponding to said capillary seal part;

a cap-like cylindrical member with a bottom covering said bearing member and said annular member on the bearing member side, said annular member on the bearing member side being located at an open end of said cap-like cylindrical member with a bottom;

a taper or step formed on the outer periphery surface of said annular member on the shaft member side; and

a taper or step being formed on the inner periphery surface of said annular member on the bearing member side;

wherein the outer periphery surface of said annular member on the shaft member side and the inner periphery surface of said annular member on the bearing member side are arranged close to each other in the axial and radial directions to form said capillary seal part, and to preventing said rotating parts and said stationary parts from disengaging from each other.

13. The fluid dynamic bearing mechanism of claim12, further comprising:

dynamic pressure grooves formed either on the outer periphery surface of said shaft member or the inner periphery surface of said bearing member for generating dynamic pressure to support a radial load; and

dynamic pressure grooves formed either on bottom surface of said annular member on the shaft member side or a surface of said bearing member opposing said bottom surface for generating dynamic pressure to support an axial load.

14. A fluid dynamic bearing mechanism of claim 12, wherein said annular member on the shaft side is made of quenched steel.

15. A fluid dynamic bearing mechanism of claim 12, wherein said annular member on the shaft side abuts the end surface of said rotor member, and thereby supports said rotor member in the axial direction.

16. The fluid dynamic bearing mechanism of claim 12, wherein an annular groove capable of alleviating boundary surface fluctuations of said lubricant in said capillary seal part is formed between said annular member on the shaft member side and said annular member on the bearing member side.

17. The fluid dynamic bearing mechanism of claim 12, wherein a connecting passage is formed to connect said capillary seal with a minute gap formed between an end surface of said bearing member and said cap like cylindrical member with a bottom.

18. A fluid dynamic bearing mechanism of claim 12, further comprising:

a rotor attached to said shaft member; and

a plurality of lubricant supply ports formed on said rotor member, said supply ports opposing said capillary seal part in the axial direction.

19. A fluid dynamic bearing mechanism of claim 12, wherein said annular member on the shaft member side and said shaft member are produced from a single material as an integral piece.

20. A fluid dynamic bearing mechanism of claim 12, wherein said annular member on the bearing member side and said cylindrical member are produced from the same material as an integral piece.

21. A fluid dynamic bearing mechanism of claim 12, wherein said taper formed on the outer periphery surface of said annular member on the shaft member side and said taper formed on the inner periphery surface of said annular member on the bearing member side are formed in such a manner that the radial gap between them expands as it advances axially towards an end.

22. A fluid dynamic bearing mechanism of claim 12, wherein said step formed on the outer periphery surface of said annular member on the shaft side and said step formed on the inner periphery surface of said annular member on the bearing member side are formed in such a manner that the radial gap between one half outer periphery surface portion and one half inner periphery surface portion expands as it advances axially towards an end.

23. A fluid dynamic bearing mechanism for a motor, wherein a lubricant is continuously supplied into a minute gap formed between rotating parts and stationary parts, said minute gap including dynamic pressure grooves, and wherein a capillary seal part is formed at one end of the minute gap for preventing leakage of said lubricant, said fluid dynamic bearing mechanism comprising:

a bearing member;

a reduced diameter end formed on said bearing member;

a shaft member rotatably mounted in said bearing member;

an annular member on the shaft member side mounted on said shaft member at a location corresponding to said capillary seal part;

an annular member with a sleeve on bearing member side having a sleeve part and an inner peripheral surface located corresponding to said capillary seal part, and said sleeve part being fitted on a reduced diameter end of said bearing member;

a shallow cap-type dish-like member being provided to cover the other diameter reducing end of said bearing member;

a taper or step formed on the outer periphery surface of said annular member on the shaft member side; and

a taper or step being formed on the inner peripheral surface of said annular member with a sleeve on bearing member side;

wherein the outer periphery surface of said annular member on the shaft member side and said inner peripheral surface of said annular member with a sleeve on the bearing member side are arranged close to each other in the axial and radial directions to form said capillary seal part, and to preventing said rotating parts and said stationary parts from disengaging from each other.

24. The fluid dynamic bearing mechanism of claim 23, further comprising:

dynamic pressure grooves formed either on the outer periphery surface of said shaft member or the inner periphery surface of said bearing member for generating dynamic pressure to support a radial load; and

dynamic pressure grooves formed either on bottom surface of said annular member on the shaft member side or a surface of said bearing member opposing said bottom surface for generating dynamic pressure to support an axial load.

25. A fluid dynamic bearing mechanism of claim 23, wherein said annular member on the shaft side is made of quenched steel.

26. A fluid dynamic bearing mechanism of claim 23, wherein said annular member on the shaft side abuts the end surface of said rotor member, and thereby supports said rotor member in the axial direction.

27. A fluid dynamic bearing mechanism of claim 23, further comprising:

a rotor attached to said shaft member; and

a plurality of lubricant supply ports formed on said rotor member, said supply ports opposing said capillary seal part in the axial direction.

28. A fluid dynamic bearing mechanism of claim 23, wherein said annular member on the shaft member side and said shaft member are produced from a single material as an integral piece.

29. The fluid dynamic bearing mechanism of claim 23, further comprising:

a middle part with an enlarged diameter formed on said bearing member, said middle part with an enlarged diameter being fitted on a cylindrical bearing holding part of a base member of said fluid dynamic bearing.

30. The fluid dynamic bearing mechanism of claim 23, wherein an annular groove capable of alleviating boundary surface fluctuations of said lubricant in said capillary seal part is formed between said annular member on the shaft member side and said annular member with a sleeve on the bearing member side.

31. The fluid dynamic bearing mechanism of claim 23, wherein a connecting passage is formed to connect said capillary seal with the minute gap formed between an end surface of said bearing member and said shallow cap-type dish-like member.

32. A fluid dynamic bearing mechanism of claim 23, wherein said annular member on the bearing member side and said cylindrical member are produced from the same material as an integral piece.

33. A fluid dynamic bearing mechanism of claim 23, wherein said taper formed on the outer periphery surface of said annular member on the shaft member side and said taper formed on the inner periphery surface of said annular member with a sleeve on the bearing member side are formed in such a manner that the radial gap between them expands as it advances axially towards an end.

34. A fluid dynamic bearing mechanism of claim 23, wherein said step formed on the outer periphery surface of said annular member on the shaft side and said step formed on the inner periphery surface of said annular member with a sleeve on the bearing member side are formed in such a manner that the radial gap between one half outer periphery surface portion and one half inner periphery surface portion expands as it advances axially towards an end.

35. A fluid dynamic bearing mechanism for a motor, wherein a lubricant is continuously supplied into a minute gap formed between rotating parts and stationary parts, said minute gap including dynamic pressure grooves, and wherein a capillary seal part is formed at one end of the minute gap for preventing leakage of said lubricant, said fluid dynamic bearing mechanism comprising:

a bearing member;

a shaft member rotatably mounted in said bearing member;

an annular member on the shaft member side mounted on said shaft member at a location corresponding to said capillary seal part;

an annular member on the bearing member side abutting an axial end surface of said bearing member at a location corresponding to said capillary seal part;

a cylindrical member covering said bearing member and said annular member on the bearing member side;

a cover plate fitted on an opening on an end of said cylindrical member, thus blocking an open end of a bearing hole of said bearing member;

a taper or step formed on the outer periphery surface of said annular member on the shaft member side; and

a taper or step being formed on the inner periphery surface of said annular member on the bearing member side;

wherein the outer periphery surface of said annular member on the shaft member side and the inner periphery surface of said annular member on the bearing member side are arranged close to each other in the axial and radial directions to form said capillary seal part, and to preventing said rotating parts and said stationary parts from disengaging from each other.

36. The fluid dynamic bearing mechanism of claim 35, further comprising:

dynamic pressure grooves formed either on the outer periphery surface of said shaft member or the inner periphery surface of said bearing member for generating dynamic pressure to support a radial load; and

dynamic pressure grooves formed either on bottom surface of said annular member on the shaft member side or a surface of said bearing member opposing said bottom surface for generating dynamic pressure to support an axial load.

37. A fluid dynamic bearing mechanism of claim 35, wherein said annular member on the shaft side is made of quenched steel.

38. A fluid dynamic bearing mechanism of claim 35, wherein said annular member on the shaft side abuts the end surface of said rotor member, and thereby supports said rotor member in the axial direction.

39. A fluid dynamic bearing mechanism of claim 35, further comprising:

a rotor attached to said shaft member; and

a plurality of lubricant supply ports formed on said rotor member, said supply ports opposing said capillary seal part in the axial direction.

40. A fluid dynamic bearing mechanism of claim 35, wherein said annular member on the shaft member side and said shaft member are produced from a single material as an integral piece.

41. A fluid dynamic bearing mechanism of claim 35, wherein said annular member on the bearing member side and said cylindrical member are produced from the same material as an integral piece.

42. A fluid dynamic bearing mechanism of claim 35, wherein said taper formed on the outer periphery surface of said annular member on the shaft member side and said taper formed on the inner periphery surface of said annular member on the bearing member side are formed in such a manner that the radial gap between them expands as it advances axially towards an end.

43. A fluid dynamic bearing mechanism of claim 35, wherein said step formed on the outer periphery surface of said annular member on the shaft side and said step formed on the inner periphery surface of said annular member on the bearing member side are formed in such a manner that the radial gap between one half outer periphery surface portion and one half inner periphery surface portion expands as it advances axially towards an end.

44. The fluid dynamic bearing mechanism of claim 35, wherein an annular groove capable of alleviating boundary surface fluctuations of said lubricant in said

capillary seal part is formed between said annular member on the shaft member side and said annular member on the bearing member side.

45. A hard disk drive comprising:

a motor, the motor having

a stator;

a rotor mounted on the stator;

a flange formed on the rotor;

a disk mounted on the flange; and

a fluid dynamic bearing mechanism wherein a lubricant is continuously supplied into a minute gap formed between rotating parts and stationary parts, said minute gap including dynamic pressure grooves, and wherein a capillary seal part is formed at one end of the minute gap for preventing leakage of said lubricant, said fluid dynamic bearing mechanism comprising:

a bearing member;

a shaft member rotatably mounted in said bearing member;

an annular member on the shaft member side mounted on said shaft member at a location corresponding to said capillary seal part;

an annular member on the bearing member side mounted on said bearing member at a location corresponding to said capillary seal part;

a taper or step formed on the outer periphery surface of said annular member on the shaft member side; and

a taper or step being formed on the inner periphery surface of said annular member on the bearing member side;

wherein the outer periphery surface of said annular member on the shaft

member side and the inner periphery surface of said annular member on the bearing member side are arranged close to each other in the axial and radial directions to form said capillary seal part, and to preventing said rotating parts and said stationary parts from disengaging from each other.

46. The hard disk drive of claim 45 wherein the disk is chosen from a group consisting of a magnetic disk and an optical disk.

47. The hard disk drive of claim 46, further comprising:

dynamic pressure grooves formed either on the outer periphery surface of said shaft member or the inner periphery surface of said bearing member for generating dynamic pressure to support a radial load; and

dynamic pressure grooves formed either on bottom surface of said annular member on the shaft member side or a surface of said bearing member opposing said bottom surface for generating dynamic pressure to support an axial load.

48. The hard disk drive of claim 46, wherein said annular member on the bearing member side is welded to said bearing member.

49. The hard disk drive of claim 46, wherein said annular member on the shaft side is made of quenched steel.

50. The hard disk drive of claim 46, wherein said annular member on the shaft side abuts the end surface of said rotor member, and thereby supports said rotor member in the axial direction.

51. The hard disk drive of claim 46, wherein an annular groove capable of alleviating boundary surface fluctuations of said lubricant in said capillary seal part

is formed between said annular member on the shaft member side and said annular member on the bearing member side.

52. The hard disk drive of claim 46, further comprising:

a rotor attached to said shaft member; and

a plurality of lubricant supply ports formed on said rotor member, said supply ports opposing said capillary seal part in the axial direction.

53. The hard disk drive of claim 46, wherein said annular member on the shaft member side and said shaft member are produced from a single material as an integral piece.

54. The hard disk drive of claim 46, wherein said annular member on the bearing member side and said cylindrical member are produced from the same material as an integral piece.

55. The hard disk drive of claim 46, wherein said taper formed on the outer periphery surface of said annular member on the shaft member side and said taper formed on the inner periphery surface of said annular member on the bearing member side are formed in such a manner that the radial gap between them expands as it advances axially towards an end.

56. The hard disk drive of claim 46, wherein said step formed on the outer periphery surface of said annular member on the shaft side and said step formed on the inner periphery surface of said annular member on the bearing member side are formed in such a manner that the radial gap between one half outer periphery surface portion and one half inner periphery surface portion expands as it advances axially towards an end.

57. A hard disk drive comprising:

a motor, the motor having

a stator;

a rotor mounted on the stator;

a flange formed on the rotor;

a disk mounted on the flange;

a fluid dynamic bearing mechanism wherein a lubricant is continuously supplied into a minute gap formed between rotating parts and stationary parts, said minute gap including dynamic pressure grooves, and wherein a capillary seal part is formed at one end of the minute gap for preventing leakage of said lubricant, said fluid dynamic bearing mechanism comprising:

a bearing member;

a shaft member rotatably mounted in said bearing member;

an annular member on the shaft member side mounted on said shaft member at a location corresponding to said capillary seal part;

an annular member on the bearing member side abutting an axial end of said bearing member at a location corresponding to said capillary seal part;

a cap-like cylindrical member with a bottom covering said bearing member and said annular member on the bearing member side, said annular member on the bearing member side being located at an open end of said cap-like cylindrical member with a bottom;

a taper or step formed on the outer periphery surface of said annular member on the shaft member side; and

a taper or step being formed on the inner periphery surface of said annular member on the bearing member side;

wherein the outer periphery surface of said annular member on the shaft member side and the inner periphery surface of said annular member on the bearing member side are arranged close to each other in the axial and radial directions to form said capillary seal part, and to preventing said rotating parts and said stationary parts from disengaging from each other.

58. The hard disk drive of claim 57 wherein the disk is chosen from a group consisting of a magnetic disk and an optical disk.

59. The hard disk drive of claim 58, further comprising:

dynamic pressure grooves formed either on the outer periphery surface of said shaft member or the inner periphery surface of said bearing member for generating dynamic pressure to support a radial load; and

dynamic pressure grooves formed either on bottom surface of said annular member on the shaft member side or a surface of said bearing member opposing said bottom surface for generating dynamic pressure to support an axial load.

60. The hard disk drive of claim 58, wherein said annular member on the shaft side is made of quenched steel.

61. The hard disk drive of claim 58, wherein said annular member on the shaft side abuts the end surface of said rotor member, and thereby supports said rotor member in the axial direction.

62. The hard disk drive of claim 58, wherein an annular groove capable of alleviating boundary surface fluctuations of said lubricant in said capillary seal part is formed between said annular member on the shaft member side and said annular member on the bearing member side.

63. The hard disk drive of claim 58, wherein a connecting passage is formed to connect said capillary seal with a minute gap formed between an end surface of said bearing member and said cap like cylindrical member with a bottom.

64. The hard disk drive of claim 58, further comprising:

a rotor attached to said shaft member; and

a plurality of lubricant supply ports formed on said rotor member, said supply ports opposing said capillary seal part in the axial direction.

65. The hard disk drive of claim 58, wherein said annular member on the shaft member side and said shaft member are produced from a single material as an integral piece.

66. The hard disk drive of claim 58, wherein said annular member on the bearing member side and said cylindrical member are produced from the same material as an integral piece.

67. The hard disk drive of claim 58, wherein said taper formed on the outer periphery surface of said annular member on the shaft member side and said taper formed on the inner periphery surface of said annular member on the bearing member side are formed in such a manner that the radial gap between them expands as it advances axially towards an end.

68. The hard disk drive of claim 58, wherein said step formed on the outer periphery surface of said annular member on the shaft side and said step formed on the inner periphery surface of said annular member on the bearing member side are formed in such a manner that the radial gap between one half outer periphery surface

portion and one half inner periphery surface portion expands as it advances axially towards an end.

69. A hard disk drive comprising:

a motor, the motor having

a stator;

a rotor mounted on the stator;

a flange formed on the rotor;

a disk mounted on the flange;

a fluid dynamic bearing mechanism wherein a lubricant is continuously supplied into a minute gap formed between rotating parts and stationary parts, said minute gap including dynamic pressure grooves, and wherein a capillary seal part is formed at one end of the minute gap for preventing leakage of said lubricant, said fluid dynamic bearing mechanism comprising:

a bearing member;

a reduced diameter end formed on said bearing member;

a shaft member rotatably mounted in said bearing member;

an annular member on the shaft member side mounted on said shaft member at a location corresponding to said capillary seal part;

an annular member with a sleeve on bearing member side having a sleeve part and an inner peripheral surface located corresponding to said capillary seal part, and said sleeve part being fitted on a reduced diameter end of said bearing member;

a shallow cap-type dish-like member being provided to cover the other diameter reducing end of said bearing member;

a taper or step formed on the outer periphery surface of said annular member on the shaft member side; and

a taper or step being formed on the inner peripheral surface of said annular member with a sleeve on bearing member side;

wherein the outer periphery surface of said annular member on the shaft member side and said inner peripheral surface of said annular member with a sleeve on the bearing member side are arranged close to each other in the axial and radial directions to form said capillary seal part, and to preventing said rotating parts and said stationary parts from disengaging from each other.

70. The hard disk drive of claim 69 wherein the disk is chosen from a group consisting of a magnetic disk and an optical disk.

71. The hard disk drive of claim 70, further comprising:

dynamic pressure grooves formed either on the outer periphery surface of said shaft member or the inner periphery surface of said bearing member for generating dynamic pressure to support a radial load; and

dynamic pressure grooves formed either on bottom surface of said annular member on the shaft member side or a surface of said bearing member opposing said bottom surface for generating dynamic pressure to support an axial load.

72. The hard disk drive of claim 70, wherein said annular member on the shaft side is made of quenched steel.

73. The hard disk drive of claim 70, wherein said annular member on the shaft side abuts the end surface of said rotor member, and thereby supports said rotor member in the axial direction.

74. The hard disk drive of claim 70, further comprising:

a rotor attached to said shaft member; and

a plurality of lubricant supply ports formed on said rotor member, said supply ports opposing said capillary seal part in the axial direction.

75. The hard disk drive of claim 70, wherein said annular member on the shaft member side and said shaft member are produced from a single material as an integral piece.

76. The hard disk drive of claim 70, further comprising:

a middle part with an enlarged diameter formed on said bearing member, said middle part with an enlarged diameter being fitted on a cylindrical bearing holding part of a base member of said fluid dynamic bearing.

77. The hard disk drive of claim 70, wherein an annular groove capable of alleviating boundary surface fluctuations of said lubricant in said capillary seal part is formed between said annular member on the shaft member side and said annular member with a sleeve on the bearing member side.

78. The hard disk drive of claim 70, wherein a connecting passage is formed to connect said capillary seal with the minute gap formed between an end surface of said bearing member and said shallow cap-type dish-like member.

79. The hard disk drive of claim 70, wherein said annular member on the bearing member side and said cylindrical member are produced from the same material as an integral piece.

80. The hard disk drive of claim 70, wherein said taper formed on the outer periphery surface of said annular member on the shaft member side and said taper formed on the inner periphery surface of said annular member with a sleeve on the bearing member side are formed in such a manner that the radial gap between them expands as it advances axially towards an end.

81. The hard disk drive of claim 70, wherein said step formed on the outer periphery surface of said annular member on the shaft side and said step formed on the inner periphery surface of said annular member with a sleeve on the bearing member side are formed in such a manner that the radial gap between one half outer periphery surface portion and one half inner periphery surface portion expands as it advances axially towards an end.

82. A hard disk drive comprising:

a motor, the motor having

a stator;

a rotor mounted on the stator;

a flange formed on the rotor;

a disk mounted on the flange;

a fluid dynamic bearing mechanism wherein a lubricant is continuously supplied into a minute gap formed between rotating parts and stationary parts, said minute gap including dynamic pressure grooves, and wherein a capillary seal part is formed at one end of the minute gap for preventing leakage of said lubricant, said fluid dynamic bearing mechanism comprising:

a bearing member;

a shaft member rotatably mounted in said bearing member;

an annular member on the shaft member side mounted on said shaft member at a location corresponding to said capillary seal part;

an annular member on the bearing member side abutting an axial end surface of said bearing member at a location corresponding to said capillary seal part;

a cylindrical member covering said bearing member and said annular member on the bearing member side;

a cover plate fitted on an opening on an end of said cylindrical member, thus blocking an open end of a bearing hole of said bearing member;

a taper or step formed on the outer periphery surface of said annular member on the shaft member side; and

a taper or step being formed on the inner periphery surface of said annular member on the bearing member side;

wherein the outer periphery surface of said annular member on the shaft member side and the inner periphery surface of said annular member on the bearing member side are arranged close to each other in the axial and radial directions to form said capillary seal part, and to preventing said rotating parts and said stationary parts from disengaging from each other.

83. The hard disk drive of claim 82 wherein the disk is chosen from a group consisting of a magnetic disk and an optical disk.

84. The hard disk drive of claim 83, further comprising:

dynamic pressure grooves formed either on the outer periphery surface of said shaft member or the inner periphery surface of said bearing member for generating dynamic pressure to support a radial load; and

dynamic pressure grooves formed either on bottom surface of said annular

member on the shaft member side or a surface of said bearing member opposing said bottom surface for generating dynamic pressure to support an axial load.

85. The hard disk drive of claim 83, wherein said annular member on the shaft side is made of quenched steel.

86. The hard disk drive of claim 83, wherein said annular member on the shaft side abuts the end surface of said rotor member, and thereby supports said rotor member in the axial direction.

87. The hard disk drive of claim 83, further comprising:

a rotor attached to said shaft member; and

a plurality of lubricant supply ports formed on said rotor member, said supply ports opposing said capillary seal part in the axial direction.

88. The hard disk drive of claim 83, wherein said annular member on the shaft member side and said shaft member are produced from a single material as an integral piece.

89. The hard disk drive of claim 83, wherein said annular member on the bearing member side and said cylindrical member are produced from the same material as an integral piece.

90. The hard disk drive of claim 83, wherein said taper formed on the outer periphery surface of said annular member on the shaft member side and said taper formed on the inner periphery surface of said annular member on the bearing member side are formed in such a manner that the radial gap between them expands as it advances axially towards an end.

91. The hard disk drive of claim 83, wherein said step formed on the outer periphery surface of said annular member on the shaft side and said step formed on the inner periphery surface of said annular member on the bearing member side are formed in such a manner that the radial gap between one half outer periphery surface portion and one half inner periphery surface portion expands as it advances axially towards an end.

92. The hard disk drive of claim 83, wherein an annular groove capable of alleviating boundary surface fluctuations of said lubricant in said capillary seal part is formed between said annular member on the shaft member side and said annular member on the bearing member side.